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Meat: Making Global Warming Worse

By Bryan Walsh

Need another reason to feel guilty about feeding your children that Happy Meal — aside from the fat, the calories and that voice in your head asking why you can't be bothered to actually cook a well-balanced meal now and then? Rajendra Pachauri would like to offer you one. The head of the U.N.'s Nobel Prize-winning Intergovernmental Panel on Climate Change, Pachauri on Monday urged people around the world to cut back on meat in order to combat climate change. "Give up meat for one day [per week] at least initially, and decrease it from there," Pachauri told Britain's *Observer* newspaper. "In terms of immediacy of action and the feasibility of bringing about reductions in a short period of time, it clearly is the most attractive opportunity." So, that addiction to pork and beef isn't just clogging your arteries; it's flame-broiling the earth, too.

By the numbers, Pachauri is absolutely right. In a 2006 report, the U.N. Food and Agriculture Organization (FAO) concluded that worldwide livestock farming generates 18% of the planet's greenhouse gas emissions — by comparison, all the world's cars, trains, planes and boats account for a combined 13% of greenhouse gas emissions. Much of livestock's contribution to global warming come from deforestation, as the growing demand for meat results in trees being cut down to make space for pasture or farmland to grow animal feed. Livestock takes up a lot of space — nearly one-third of the earth's entire landmass. In Latin America, the FAO estimates that some 70% of former forest cover has been converted for grazing. Lost forest cover heats the planet, because trees absorb CO₂ while they're alive — and when they're burned or cut down, the greenhouse gas is released back into the atmosphere.

Then there's manure — all that animal waste generates nitrous oxide, a greenhouse gas that has 296 times the warming effect of CO₂. And of course, there is cow flatulence: as cattle digest grass or grain, they produce methane gas,

of which they expel up to 200 L a day. Given that there are 100 million cattle in the U.S. alone, and that methane has 23 times the warming impact of CO₂, the gas adds up.

The worrisome news is that as the world economy grows, so does global meat consumption. The average person in the industrialized world eats more than 176 lb. of meat annually, compared with around 66 lb. consumed by the average resident of the developing world. As developing nations get richer, one of the first things citizens spend their extra income on is a more meat-rich diet. Whereas pork would once have been a rare luxury in China, today even the relatively poor in the country's cities can afford a little meat at almost every meal — so much so that pork imports to China rose more than 900% through the first four months of the year. In 2008, global meat production is expected to top 280 million tons, and that figure could nearly double by 2050.

Producing all that meat will do more than just warm the world; it will also raise pressure on land resources. The FAO estimates that about 20% of the planet's pastureland has been degraded by grazing animals, and increased demand for meat means increased demand for animal feed — much of the world's grain production is fed to animals rather than to humans. (The global spike in grain prices over the past year is in large part due to the impact on grain supplies of the growing demand for meat.) The expanded production of meat has been facilitated by industrial feedlots, which bleed antibiotics and other noxious chemicals. And of course, the human health impact of too much meat can be seen in everything from bloated waistlines in America to rising rates of cardiovascular disease in developing nations, where heart attacks were once as rare as a T-bone steak.

So is Pachauri right that going vegetarian can save the planet? (At least the 68-year-old Indian economist practices what he preaches.) It's true that giving up that average 176 lb. of meat a year is one of the greenest lifestyle changes you can make as an individual. You can drive a more fuel-efficient car, or install compact

fluorescent lightbulbs, or improve your insulation, but unless you intend to hunt wild buffalo and boar, there's really no green way to get meat — although organic, locally farmed beef or chicken is better than its factory-raised equivalents. The geophysicists Gidon Eschel and Pamela Martin have estimated that if every American reduced meat consumption by just 20%, the greenhouse gas savings would be the same as if we all switched from a normal sedan to a hybrid Prius.

Still, Pachauri is just slightly off. It's a tactical mistake, first of all, to focus global warming action on personal restrictions. The developed world could cut back hugely on its meat consumption, but those gains would be largely swallowed up — sorry — by the developing world, which isn't likely to give up its newly acquired taste for cheeseburgers and pork. The same goes for energy use, or travel. It's great for magazines to come up with [51 ways you can save the environment](#), but relying on individuals to voluntarily change their behavior is nowhere near as effective as political change aimed at speeding the transition to an economy far less carbon-intensive than our current one. So, by all means cut back on the burgers — I recommend [a nice deep-fried scorpion](#) — but remember that your choices from the takeout menu will matter less than the choices made by those who inherit the White House next January.